RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/573,522
Source: IFW
Date Processed by STIC: 4/10/06

ENTERED

IFWP

RAW SEQUENCE LISTING DATE: 04/10/2006
PATENT APPLICATION: **US/10/573,522** TIME: 10:43:31

Input Set : **A:\082368-007400US.txt**
Output Set: **N:\CRF4\04102006\J573522.raw**

```
      <110> APPLICANT: Nakamura, Yusuke
            Katagiri, Toyomasa
            Nakatsuru, Shuichi
      <120> TITLE OF INVENTION: METHOD OF DIAGNOSING BREAST CANCER
      <130> FILE REFERENCE: 082368-007400US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/573,522
C--> 13 <141> CURRENT FILING DATE: 2006-03-23
      <150> PRIOR APPLICATION NUMBER: PCT/JP2004/011741
      <151> PRIOR FILING DATE: 2004-08-10
      <150> PRIOR APPLICATION NUMBER: US 60/505,571
      <151> PRIOR FILING DATE: 2003-09-24
      <160> NUMBER OF SEQ ID NOS: 34
      <170> SOFTWARE: FastSEQ for Windows Version 4.0
      <210> SEQ ID NO: 1
      <211> LENGTH: 928
      <212> TYPE: DNA
      <213> ORGANISM: Homo sapiens
      <220> FEATURE:
      <221> NAME/KEY: CDS
      <222> LOCATION: (127)...(720)
      <400> SEQUENCE: 1
gcgcgcagcg ctggtacccc gttggtccgc gcgttgctgc gttgtgaggg gtgtcagctc 60
agtgcatccc aggcagctct tagtgtggag cagtgaactg tgtgtggttc cttctacttg 120
gggatc atg cag aga gct tca cgt ctg aag aga gag ctg cac atg tta    168
       Met Gln Arg Ala Ser Arg Leu Lys Arg Glu Leu His Met Leu
        1               5                  10
gcc aca gag cca ccc cca ggc atc aca tgt tgg caa gat aaa gac caa   216
Ala Thr Glu Pro Pro Pro Gly Ile Thr Cys Trp Gln Asp Lys Asp Gln
 15                  20                  25                  30
atg gat gac ctg cga gct caa ata tta ggt gga gcc aac aca cct tat   264
Met Asp Asp Leu Arg Ala Gln Ile Leu Gly Gly Ala Asn Thr Pro Tyr
                 35                  40                  45
gag aaa ggt gtt ttt aag cta gaa gtt atc att cct gag agg tac cca   312
Glu Lys Gly Val Phe Lys Leu Glu Val Ile Ile Pro Glu Arg Tyr Pro
             50                  55                  60
ttt gaa cct cct cag atc cga ttt ctc act cca att tat cat cca aac   360
Phe Glu Pro Pro Gln Ile Arg Phe Leu Thr Pro Ile Tyr His Pro Asn
         65                  70                  75
att gat tct gct gga agg att tgt ctg gat gtt ctc aaa ttg cca cca   408
Ile Asp Ser Ala Gly Arg Ile Cys Leu Asp Val Leu Lys Leu Pro Pro
     80                  85                  90
aaa ggt gct tgg aga cca tcc ctc aac atc gca act gtg ttg acc tct   456
Lys Gly Ala Trp Arg Pro Ser Leu Asn Ile Ala Thr Val Leu Thr Ser
```

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Input Set : A:\082368-007400US.txt
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```
61  95                  100                 105                 110
63 att cag ctg ctc atg tca gaa ccc aac cct gat gac ccg ctc atg gct   504
64 Ile Gln Leu Leu Met Ser Glu Pro Asn Pro Asp Asp Pro Leu Met Ala
65                  115                 120                 125
67 gac ata tcc tca gaa ttt aaa tat aat aag cca gcc ttc ctc aag aat   552
68 Asp Ile Ser Ser Glu Phe Lys Tyr Asn Lys Pro Ala Phe Leu Lys Asn
69              130                 135                 140
71 gcc aga cag tgg aca gag aag cat gca aga cag aaa caa aag gct gat   600
72 Ala Arg Gln Trp Thr Glu Lys His Ala Arg Gln Lys Gln Lys Ala Asp
73          145                 150                 155
75 gag gaa gag atg ctt gat aat cta cca gag gct ggt gac tcc aga gta   648
76 Glu Glu Glu Met Leu Asp Asn Leu Pro Glu Ala Gly Asp Ser Arg Val
77      160                 165                 170
79 cac aac tca aca cag aaa agg aag gcc agt cag cta gta ggc ata gaa   696
80 His Asn Ser Thr Gln Lys Arg Lys Ala Ser Gln Leu Val Gly Ile Glu
81 175                 180                 185                 190
83 aag aaa ttt cat cct gat gtt tag gggacttgtc ctggttcatc ttagttaatg  750
84 Lys Lys Phe His Pro Asp Val  *
85                  195
87 tgttctttgc caaggtgatc taagttgcct accttgaatt ttttttaaa tatatttgat 810
88 gacataattt ttgtgtagtt tatttatctt gtacatatgt attttgaaat cttttaaacc 870
89 tgaaaaataa atagtcattt aatgttgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaa   928
91 <210> SEQ ID NO: 2
92 <211> LENGTH: 197
93 <212> TYPE: PRT
94 <213> ORGANISM: Homo sapiens
96 <400> SEQUENCE: 2
97 Met Gln Arg Ala Ser Arg Leu Lys Arg Glu Leu His Met Leu Ala Thr
98  1               5                  10                  15
99 Glu Pro Pro Pro Gly Ile Thr Cys Trp Gln Asp Lys Asp Gln Met Asp
100             20                  25                  30
101 Asp Leu Arg Ala Gln Ile Leu Gly Gly Ala Asn Thr Pro Tyr Glu Lys
102         35                  40                  45
103 Gly Val Phe Lys Leu Glu Val Ile Ile Pro Glu Arg Tyr Pro Phe Glu
104     50                  55                  60
105 Pro Pro Gln Ile Arg Phe Leu Thr Pro Ile Tyr His Pro Asn Ile Asp
106 65                  70                  75                  80
107 Ser Ala Gly Arg Ile Cys Leu Asp Val Leu Lys Leu Pro Pro Lys Gly
108                 85                  90                  95
109 Ala Trp Arg Pro Ser Leu Asn Ile Ala Thr Val Leu Thr Ser Ile Gln
110             100                 105                 110
111 Leu Leu Met Ser Glu Pro Asn Pro Asp Asp Pro Leu Met Ala Asp Ile
112         115                 120                 125
113 Ser Ser Glu Phe Lys Tyr Asn Lys Pro Ala Phe Leu Lys Asn Ala Arg
114     130                 135                 140
115 Gln Trp Thr Glu Lys His Ala Arg Gln Lys Gln Lys Ala Asp Glu Glu
116 145                 150                 155                 160
117 Glu Met Leu Asp Asn Leu Pro Glu Ala Gly Asp Ser Arg Val His Asn
118                 165                 170                 175
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RAW SEQUENCE LISTING DATE: 04/10/2006
PATENT APPLICATION: US/10/573,522 TIME: 10:43:31

Input Set : A:\082368-007400US.txt
Output Set: N:\CRF4\04102006\J573522.raw

```
119 Ser Thr Gln Lys Arg Lys Ala Ser Gln Leu Val Gly Ile Glu Lys Lys
120             180                 185                 190
121 Phe His Pro Asp Val
122         195
125 <210> SEQ ID NO: 3
126 <211> LENGTH: 1472
127 <212> TYPE: DNA
128 <213> ORGANISM: Homo sapiens
130 <220> FEATURE:
131 <221> NAME/KEY: CDS
132 <222> LOCATION: (53)...(1189)
134 <400> SEQUENCE: 3
135 ggccactgag ccggggtgca gtggcagcgg gagagtacct ggcgatggcg at atg agc 58
136                                                           Met Ser
137                                                            1
139 ggt gcg ggg gtg gcg gct ggg acg cgg ccc ccc agc tcg ccg acc ccg   106
140 Gly Ala Gly Val Ala Ala Gly Thr Arg Pro Pro Ser Ser Pro Thr Pro
141          5                  10                  15
143 ggc tct cgg cgc cgg cgc cag cgc ccc tct gtg ggc gtc cag tcc ttg   154
144 Gly Ser Arg Arg Arg Arg Gln Arg Pro Ser Val Gly Val Gln Ser Leu
145      20                  25                  30
147 agg ccg cag agc ccg cag ctc agg cag agc gac ccg cag aaa cgg aac   202
148 Arg Pro Gln Ser Pro Gln Leu Arg Gln Ser Asp Pro Gln Lys Arg Asn
149  35                  40                  45                  50
151 ctg gac ctg gag aaa agc ctg cag ttc ctg cag cag cag cac tcg gag   250
152 Leu Asp Leu Glu Lys Ser Leu Gln Phe Leu Gln Gln Gln His Ser Glu
153                  55                  60                  65
155 atg ctg gcc aag ctc cat gag gag atc gag cat ctg aag cgg gaa aac   298
156 Met Leu Ala Lys Leu His Glu Glu Ile Glu His Leu Lys Arg Glu Asn
157              70                  75                  80
159 aag gat ctc cat tac aag ctc ata atg aat cag aca tca cag aag aaa   346
160 Lys Asp Leu His Tyr Lys Leu Ile Met Asn Gln Thr Ser Gln Lys Lys
161          85                  90                  95
163 gat ggc ccc tca gga aac cac ctt tcc agg gcc tct gct ccc ttg ggc   394
164 Asp Gly Pro Ser Gly Asn His Leu Ser Arg Ala Ser Ala Pro Leu Gly
165     100                 105                 110
167 gct cgc tgg gtc tgc atc aac gga gtg tgg gta gag ccg gga gga ccc   442
168 Ala Arg Trp Val Cys Ile Asn Gly Val Trp Val Glu Pro Gly Gly Pro
169 115                 120                 125                 130
171 agc cct gcc agg ctg aag gag ggc tcc tca cgg aca cac agg cca gga   490
172 Ser Pro Ala Arg Leu Lys Glu Gly Ser Ser Arg Thr His Arg Pro Gly
173                 135                 140                 145
175 ggc aag cgt ggg cgt ctt gcg ggc ggt agc gcc gac act gtg cgc tct   538
176 Gly Lys Arg Gly Arg Leu Ala Gly Gly Ser Ala Asp Thr Val Arg Ser
177             150                 155                 160
179 cct gca gac agc ctc tcc atg tca agc ttc cag tct gtc aag tcc atc   586
180 Pro Ala Asp Ser Leu Ser Met Ser Ser Phe Gln Ser Val Lys Ser Ile
181         165                 170                 175
183 tct aat tca ggc aag gcc agg ccc cag ccc ggc tcc ttc aac aag caa   634
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RAW SEQUENCE LISTING DATE: 04/10/2006
PATENT APPLICATION: US/10/573,522 TIME: 10:43:31

Input Set : A:\082368-007400US.txt
Output Set: N:\CRF4\04102006\J573522.raw

```
184 Ser Asn Ser Gly Lys Ala Arg Pro Gln Pro Gly Ser Phe Asn Lys Gln
185     180                 185                 190
187 gat tca aaa gct gac gtc tcc cag aag gcg gac ctg gaa gag gag ccc   682
188 Asp Ser Lys Ala Asp Val Ser Gln Lys Ala Asp Leu Glu Glu Glu Pro
189 195                 200                 205                 210
191 cta ctt cac aac agc aag ctg gac aaa gtt cct ggg gta caa ggg cag   730
192 Leu Leu His Asn Ser Lys Leu Asp Lys Val Pro Gly Val Gln Gly Gln
193                 215                 220                 225
195 gcc aga aag gag aaa gca gag gcc tct aat gca gga gct gcc tgt atg   778
196 Ala Arg Lys Glu Lys Ala Glu Ala Ser Asn Ala Gly Ala Ala Cys Met
197             230                 235                 240
199 ggg aac agc cag cac cag ggc agg cag atg ggg gcg ggg gca cac ccc   826
200 Gly Asn Ser Gln His Gln Gly Arg Gln Met Gly Ala Gly Ala His Pro
201         245                 250                 255
203 cca atg atc ctg ccc ctt ccc ctg cga aag ccc acc aca ctt agg cag   874
204 Pro Met Ile Leu Pro Leu Pro Leu Arg Lys Pro Thr Thr Leu Arg Gln
205     260                 265                 270
207 tgc gaa gtg ctc atc cgc gag ctg tgg aat acc aac ctc ctg cag acc   922
208 Cys Glu Val Leu Ile Arg Glu Leu Trp Asn Thr Asn Leu Leu Gln Thr
209 275                 280                 285                 290
211 caa gag ctg cgg cac ctc aag tcc ctc ctg gaa ggg agc cag agg ccc   970
212 Gln Glu Leu Arg His Leu Lys Ser Leu Leu Glu Gly Ser Gln Arg Pro
213                 295                 300                 305
215 cag gca gcc ccg gag gaa gct agc ttt ccc agg gac caa gaa gcc acg   1018
216 Gln Ala Ala Pro Glu Glu Ala Ser Phe Pro Arg Asp Gln Glu Ala Thr
217             310                 315                 320
219 cat ttc ccc aag gtc tcc acc aag agc ctc tcc aag aaa tgc ctg agc   1066
220 His Phe Pro Lys Val Ser Thr Lys Ser Leu Ser Lys Lys Cys Leu Ser
221         325                 330                 335
223 cca cct gtg gcg gag cgt gcc atc ctg ccc gca ctg aag cag acc ccg   1114
224 Pro Pro Val Ala Glu Arg Ala Ile Leu Pro Ala Leu Lys Gln Thr Pro
225     340                 345                 350
227 aag aac aac ttt gcc gag agg cag aag agg ctg cag gca atg cag aaa   1162
228 Lys Asn Asn Phe Ala Glu Arg Gln Lys Arg Leu Gln Ala Met Gln Lys
229 355                 360                 365                 370
231 cgg cgc ctg cat cgc tca gtg ctt tga gccaccccaa tctggtcagt        1209
232 Arg Arg Leu His Arg Ser Val Leu  *
233                 375
235 gccaggccca ccaacctgca gctggagact ggctctctat agcatttcct gatacttccg 1269
236 ctacttttag gcctggctaa attccaagac agataacact caagatagat aaagtacttg 1329
237 atctccaaac tgacaaactg tttatttttct agctgttatt ttgctatttg gcatttacat 1389
238 aaaagcacac gatgaagcag gtatcgcctt acctgttgaa actgaaaata aagcttgttt 1449
239 atttccaaaa aaaaaaaaaa aaa                                        1472
241 <210> SEQ ID NO: 4
242 <211> LENGTH: 378
243 <212> TYPE: PRT
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 4
247 Met Ser Gly Ala Gly Val Ala Ala Gly Thr Arg Pro Pro Ser Ser Pro
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PATENT APPLICATION: US/10/573,522 TIME: 10:43:31

Input Set : A:\082368-007400US.txt
Output Set: N:\CRF4\04102006\J573522.raw

```
248  1               5                  10                  15
249 Thr Pro Gly Ser Arg Arg Arg Arg Gln Arg Pro Ser Val Gly Val Gln
250             20                  25                  30
251 Ser Leu Arg Pro Gln Ser Pro Gln Leu Arg Gln Ser Asp Pro Gln Lys
252         35                  40                  45
253 Arg Asn Leu Asp Leu Glu Lys Ser Leu Gln Phe Leu Gln Gln Gln His
254     50                  55                  60
255 Ser Glu Met Leu Ala Lys Leu His Glu Glu Ile Glu His Leu Lys Arg
256 65                  70                  75                  80
257 Glu Asn Lys Asp Leu His Tyr Lys Leu Ile Met Asn Gln Thr Ser Gln
258                 85                  90                  95
259 Lys Lys Asp Gly Pro Ser Gly Asn His Leu Ser Arg Ala Ser Ala Pro
260             100                 105                 110
261 Leu Gly Ala Arg Trp Val Cys Ile Asn Gly Val Trp Val Glu Pro Gly
262         115                 120                 125
263 Gly Pro Ser Pro Ala Arg Leu Lys Glu Gly Ser Ser Arg Thr His Arg
264     130                 135                 140
265 Pro Gly Gly Lys Arg Gly Arg Leu Ala Gly Gly Ser Ala Asp Thr Val
266 145                 150                 155                 160
267 Arg Ser Pro Ala Asp Ser Leu Ser Met Ser Ser Phe Gln Ser Val Lys
268                 165                 170                 175
269 Ser Ile Ser Asn Ser Gly Lys Ala Arg Pro Gln Pro Gly Ser Phe Asn
270             180                 185                 190
271 Lys Gln Asp Ser Lys Ala Asp Val Ser Gln Lys Ala Asp Leu Glu Glu
272         195                 200                 205
273 Glu Pro Leu Leu His Asn Ser Lys Leu Asp Lys Val Pro Gly Val Gln
274     210                 215                 220
275 Gly Gln Ala Arg Lys Glu Lys Ala Glu Ala Ser Asn Ala Gly Ala Ala
276 225                 230                 235                 240
277 Cys Met Gly Asn Ser Gln His Gln Gly Arg Gln Met Gly Ala Gly Ala
278                 245                 250                 255
279 His Pro Pro Met Ile Leu Pro Leu Pro Leu Arg Lys Pro Thr Thr Leu
280             260                 265                 270
281 Arg Gln Cys Glu Val Leu Ile Arg Glu Leu Trp Asn Thr Asn Leu Leu
282         275                 280                 285
283 Gln Thr Gln Glu Leu Arg His Leu Lys Ser Leu Leu Glu Gly Ser Gln
284     290                 295                 300
285 Arg Pro Gln Ala Ala Pro Glu Glu Ala Ser Phe Pro Arg Asp Gln Glu
286 305                 310                 315                 320
287 Ala Thr His Phe Pro Lys Val Ser Thr Lys Ser Leu Ser Lys Lys Cys
288                 325                 330                 335
289 Leu Ser Pro Pro Val Ala Glu Arg Ala Ile Leu Pro Ala Leu Lys Gln
290             340                 345                 350
291 Thr Pro Lys Asn Asn Phe Ala Glu Arg Gln Lys Arg Leu Gln Ala Met
292         355                 360                 365
293 Gln Lys Arg Arg Leu His Arg Ser Val Leu
294     370                 375
297 <210> SEQ ID NO: 5
298 <211> LENGTH: 1315
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VERIFICATION SUMMARY DATE: 04/10/2006
PATENT APPLICATION: **US/10/573,522** TIME: 10:43:32

Input Set : **A:\082368-007400US.txt**
Output Set: **N:\CRF4\04102006\J573522.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date